UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,101	12/10/2003	Heung-For Cheng	42P17566	9180

59796   7590   01/22/2008

INTEL CORPORATION
c/o INTELLEVATE, LLC
P.O. BOX 52050
MINNEAPOLIS, MN 55402

EXAMINER
JOO, JOSHUA

ART UNIT	PAPER NUMBER
2154	

MAIL DATE	DELIVERY MODE
01/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/733,101	CHENG ET AL.
	Examiner	Art Unit	
	Joshua Joo	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 December 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

Detailed Action

1.   This Office action is in response to communication (claims) dated 12/10/2003.

    Claims 1-27 are presented for examination.

2.   Oath or Declaration dated 12/10/2003 is accepted.

Drawings dated 12/10/2003 are accepted.

Specification

3.   The disclosure is objected to because it contains an embedded hyperlink and/or other form of

browser-executable code. See page 5, paragraph 0014. Applicant is required to delete the embedded

hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

5.   Claims 11-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-

statutory subject matter.

    Regarding claim 11, Applicant is seeking to patent a machine accessible medium. Applicant has

provided evidence in the specification of the instant application (page 14, paragraph 0036) that Applicant

intends the machine-access medium to include a carrier wave. Applicant also intends the machine-access

medium to include "any medium encoding a sequence of instructions", and one of ordinary skill in the art

may reasonability interpret "any medium encoding a sequence of instructions" as nonphysical hardware

such as a signal. Carrier wave or a medium encoding a sequence of instructions such as a signal does not

meet one of the four categories of invention and therefore is not statutory. Specifically, a carrier wave or

signal is not a series of steps or acts and thus is not a process. A carrier wave or signal is not a physical

article or object and as such is not a machine or manufacture. A carrier wave or signal is not a

combination of substances and therefore not a composition of matter.

Claim Objections

6.   Claims 1-19 and 25 are objected to because of the following informalities:

i)   The following terms lack sufficient antecedent basis:

claim 1, "the received service request" and "the corresponding subagent";
claim 2, "the determined subagent" and "the service request";
claim 4, "the service request";
claim 5, "the identified client";
claim 11, "the received service request" and "the corresponding subagent";
claim 12, "the determined subagent" and "the service request";
claim 14, "the service request";
claim 15, "the identified client"; and
claim 25, "the identified client".

Examiner suggests amending the claims to clarify the above language such as by
changing "the received service request" to "the service request received..." and "the
identified client" to "the client identified..."

ii)   Regarding claim 11, the phrase "store the service request in s selected storage location"
has a typographical error.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
subject matter which the applicant regards as his invention.

8.   Claims 11-20, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as the

invention.

i)   Regarding claim 11, "the computing device" lacks sufficient antecedent basis.

ii)   Regarding claim 24, it is not clear as to which service "the service request" is referring to since independent claim 21 comprises "service requests" and "new service request".

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 1, 3-5, 9, 11, 13-15, 19, 21, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over IPMI, Intelligent Platform Management Interface Specification v1.5, February 20, 2002 (IPMI spec. hereinafter), in view of Neale, US Publication #2004/0158625 (Neale hereinafter).

11.   As per claims 1 and 11, IPMI spec. discloses substantially the invention as claimed including a method and a machine-access medium for remotely managing a computing device, comprising:

receiving, by the computing device, a service request sent by a remote application via an out-of-band (OOB) connection (Sections 1.6.9; 1.6.11. IPMI. Out of band interface. Sections 1.6.18; 1.8; 6.11. Remote management/access.);

storing the service request in a selected storage location (Section 6.10.1. Receive message queue.);

polling the selected storage location for new requests (Section 6.10.1; Section 6.12.2. Poll for messages in queue.);

servicing the service request (Sections 1.6.5-1.6.6; 1.8. Access to information such as monitored data or logs. Section 1.6.11 FRU information.); and

sending a response to the remote application to indicate that the service request has been performed (Sections 1.4, 6.12.14, 7.3. Response back to requestor.).

12.   IPMI spec. discloses of performing the above functions but is silent in regards to different agents such as a multiplex agent and subagent to perform the above functions. IPMI spec. is also silent as to determining and invoking a subagent to perform a service request.

13.   Neale teaches a system for monitoring devices, wherein a master agent receives client requests and sub-agents are determined and invoked to service the requests (Paragraphs 0022-0023).

14.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the functions taught by IPMI to be performed by agents and for a sub-agent to be determined and invoked to service a request. The motivation for the suggested combination is that Neale's teachings would allow automatic execution of tasks and distribution of tasks, which would increase performance.

15.   As per claim 21, IPMI spec. discloses substantially the invention as claimed including a system for servicing out-of-band (OOB) service requests, comprising:

         a processor communicatively coupled to a memory store and a baseboard management controller (BMC), wherein the BMC is configured to accept service requests from a remote application communicating with the BMC via an OOB connection (Section 1.6.3; Fig. 1.2. BMC. Sections 1.6.9; 1.6.11. IPMI. Out of band interface. Section 1.6.18; 1.8; 6.11. Remote management/access.), wherein accepted service requests are stored in a selected storage location in the memory store (Section 6.10.1. Receive message queue.);

         polling the selected storage location for a new service request (Section 6.10.1; Section 6.12.2. Poll for messages in queue. Module that polls considered as multiplexing agent.); and

         servicing the service request (Sections 1.6.5-1.6.6; 1.8. Access to information such as monitored data or logs. Section 1.6.11 FRU information.).

16.   IPMI spec. teaches of performing the above functions but is silent in regards to different agents performing the above functions. IPMI spec. is also silent as to a multiplexing agent running on the processor, at least one subagent running on the processor, wherein a subagent corresponding to a service request type is invoked by the multiplexing agent in response to receiving a new service request.

17.   Neale teaches a system for monitoring devices, wherein a master agent receives client requests and sub-agents corresponding to the requests are invoked by the master agent to service the requests (Paragraphs 0022-0023; Paragraph 0051. Processor executing software.).

18.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the functions taught by IPMI to be performed by agents executed by a processor, wherein a sub-agent is determined and invoked by a master agent to service a request. The motivation for the suggested combination is that Neale's teachings would allow execution of tasks on behalf of a user or programs for automatic execution and allow distribution of tasks, increasing system performance.

19.   As per claims 3, 13, and 23, IPMI spec. discloses the method as recited in claim 1, wherein the selected storage location is a receive message queue (RMQ) construct of intelligent platform management interface (IPMI) (Section 6.10.1. Receive Message Queue.).

20.   As per claims 4, 14, and 24, IPMI spec. discloses the method as recited in claim 3, wherein the service request comprises header information identifying a client sending the service request (1.6.25; 6.11.4. Authenticate user of message. Section 12.6.1. Identify IP address and MAC address to respond.).

21.   As per claims 5, 15, and 25, IPMI spec. discloses the method as recited in claim 4, wherein the response is sent to the identified client using a send message construct of IPMI to indicate service request completion (Sections 1.6.4; 7.3. request/response. Section 5.2. Response message includes completion code. Section 12.3. Transfer in IPMI message format.).

22.   As per claims 9 and 19, IPMI spec. is silent regarding the method as recited in claim 1, further comprising accepting dynamic updates of available subagents by the multiplexing agent.

23.   Neale teaches a system for monitoring devices, wherein a master agent accepts updates of subagents (Paragraphs 0023; 0037. Registering of agents.).

24.   It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teachings for an agent to accept updates of subagents. The motivation for the suggested combination is that Neale's teachings would allow scalability to support additional subagents and allow invoking of the subagents to process requests.

25.   Claims 2, 12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over IPMI spec. and Neale, in view of Brebner, US Publication #2001/0014907 (Brebner hereinafter).

26.   As per claims 2, 12, and 22, IPMI spec. is silent as to the method as recited in claim 1, wherein the determined subagent is a system management basic input output system (SMBIOS) agent, and wherein the SMBIOS agent accesses the SMBIOS tables to fulfill the service request.

27.   Brebner teaches of a system for accessing resources on a network, wherein SMBIOS tables are access to complete a request (Paragraphs 0035-0036).

28.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine a known technique of accessing SMBIOS tables to fulfill service requests in the method of

accessing remotely managing and monitoring system information. The motivation for the suggested

combination is that during management of a computer system, various types of information may be

required to properly determine operating condition of the computer system, and an ability to access

different components of a system to obtain information would allow effective monitoring of computer

system. Brebner's teachings would provide a predictable result of allowing retrieval of specific type of

data (data from SMBIOS tables) to determine a user's configuration.

29.   Claims 6-7, 16-17, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over IPMI

spec. and Neale, in view of Allard et al. US Patent #6,067,559 (Allard hereinafter).

30.   As per claims 6, 16, and 26, IPMI spec. is silent regarding the method as recited in claim 1,

wherein the subagent registers a callback function with the multiplexing agent, wherein the callback

function corresponds to a service request type.

31.   Allard teaches a system for processing requests, wherein agents register callback functions

corresponding to service request types (col. 7, lines 1-5, 54-61; col. 10, lines 37-49).

32.   It would have been obvious to one of ordinary skill in the art at the time the invention was made

to combine the teachings for an agent to register callback function corresponding to a service request

type. The motivation for the suggested combination is that Allard's teachings would allow calling of

agents appropriate to process service specific requests.

33.   As per claims 7, 17, and 27, IPMI spec. is silent regarding the method as recited in claim 6,

wherein a subagent has a plurality of corresponding callback functions.

34.   Allard teaches a system for processing requests, wherein an agent has a plurality of callback

functions (col. 7, lines 1-5, 54-61; col. 10, lines 37-49).

35.   It would have been obvious to one of ordinary skill in the art at the time the invention was made

to combine the teachings for an agent to have a plurality of callback functions. The motivation for the

suggested combination is that Allard's teachings would improve the capability of the suggested system by

allowing an agent to service different requests.

36.   Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over IPMI spec. and

Neale, in view of Roe et al. US Publication #2002/0107905 (Roe hereinafter).

37.   As per claims 8 and 18, IPMI spec. and Neale taught the method as recited in claim 1 of a

multiplexing agent polling the selected storage location; and servicing of a service request by the

subagent. IPMI spec. further teaches of providing support for simultaneous sessions (Section 6.11;

6.11.14). IPMI spec. and Neale are silent in regards that the multiplexing agent operating simultaneously

with the subagent.

38.   Roe teaches of an agent service system wherein engines and agents operate simultaneously and

concurrently (Paragraphs 0039; 0075).

39.   It would have been obvious to one of ordinary skill in the art at the time the invention was made

to combine the teachings to implement agents capable of operating concurrently. The motivation for the

suggested combination is that Roe's teachings would allow tasks to be executed independent of other

tasks, reducing delay, and also allow efficient processing of service requests for the simultaneous sessions

by performing multiple tasks at once.

40.   Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over IPMI spec. and

Neale, in view of Grigsby et al. US Patent #5,802,368 (Grigsby hereinafter).

41.   As per claims 10 and 20, IPMI spec. is silent regarding the method as recited in claim 9, wherein accepting dynamic updates of available subagents comprises: identifying an added dynamic link library in a predetermined storage location, the added dynamic link library corresponding to a new subagent; and registering at least one callback function corresponding to the added dynamic link library with the multiplexing agent, wherein the identifying and registering are performed during runtime.

42.   Grigsby teaches of identifying an added dynamic link library in a predetermined storage location (DLL brought into memory), the added dynamic link library corresponding to a new subagent (corresponding to module/application); and registering at least one callback function corresponding to the added dynamic link library (registering callback function), wherein the identifying and registering are performed during runtime (col. 2, lines 54-57; col. 3, lines 53-64; col. 4, lines 26-34).

43.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the features taught by Grigsby to be implemented in the suggested system. The motivation for the suggested combination is that Grigsby's teachings would have been desirable in the suggested system to allow execution of agents to process specific tasks and allow sharing of data between programs to reduce required memory.

Conclusion

44.   A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

45.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Thursday 8AM to 5PM and every other Friday.

46.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

47.   Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

January 16, 2008
JJ